

Justin Tsai

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EXPERIENCE

CPP Virtual Reality Lab

Pomona, CA

Administrator (Paid-position)

Aug 2018 - Present

- Manage several projects with different teams for development and presentation to industry sponsors.
- Mentored students by hosting workshops and code reviews to teach students how to use Unity to develop in VR and AR.
- Maintain inventory of lab equipment (HTC Vive Pro, Oculus Rift, Microsoft HoloLens, VR-ready computers) and handle checkout to lab members.

EDUCATION

California Polytechnic University, Pomona

Pomona, CA

Bachelor of Science, Computer Science

May 2019

GPA: 3.55, Dean's List all quarters

PROJECTS

Spellbreaker VR

C#, Unity

- Currently developing a singleplayer VR game made in Unity using C#. The player will have to slash through a flurry of magic projectiles aimed at them using their swords.

Isolation

Java

- Created a player vs computer console game coded in Java. The player has to outmaneuver the computer by trapping it with previously made moves.
- Implemented a min-max algorithm utilizing alpha-beta pruning with iterative deepening that the computer uses as a heuristic to make its moves.

VR Wildfire

C#, Unity

- Worked on an existing VR research project that simulates the player being caught in a wildfire. The project records the users actions in that scenario and the time taken to perform them.
- Debugged errors by analyzing and rewriting existing code from scripts.

Below Haven

C#, Unity

- Collaborated in a team of 5 to create a 2D game in Unity using C#. The player has to travel underground to discover treasure and riches, but the levels and enemies get harder as they venture further below.
- Wrote scripts for player movement, interactions with enemies, and audio playback.

VR Combination and Permutation

C#, Unity

- Collaborated in a team of 3 to develop a VR research project that tests the player's understanding of math concepts in an escape-room environment.
- Implemented scripts for movement, controls, audio, and environment interactions.

SKILLS

- **Languages:** Java, C#, HTML, CSS, Javascript, Python, C++
- **Tools:** Unity, Visual Studio, Eclipse, NetBeans, Github Desktop, PuTTY, Android Studio